CRITICAL INCIDENT STRESS DEBRIEFING: A STUDY ON IT'S EFFECTIVENESS

ADVANCED LEADERSHIP ISSUES IN EMERGENCY MEDICAL SERVICES

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ABSTRACT

For well over the past decade, Critical Incident Stress debriefing (CISD), has been presented as the primary process of reducing distress, a significant problem, experienced by emergency service workers following critical incidents. No longer does it meet traditional, "macho" resistance is looked down on as a crutch for those who can't handle "the job." The increase in the use of CISD may have been built more on perception and rhetoric than on the critical base of empirical research that show its effectiveness in reducing distress.

This research project used descriptive methodology to investigate the relative worth of CISD. The purpose of this research was first, to provide a history of stress and CISD, explain the CISD process, and finally to examine the following questions:

1. Why has the utilization of CISD increased dramatically over the past decade?

2. Do emergency service workers experience a reduction in distress, participating in CISD after a traumatic event?

3. Is there scientific data to support CISD as a proven process in reducing the effects of Critical Incident Stress (CIS)?

4. Is CISD harmful to participants?

5. Should CISD be a mandatory process utilized by all emergency service workers who experienced a traumatic incident?

The methods employed to investigate these questions include an exhaustive literature review and information obtained by talking to associates throughout the emergency services community and

surveys.

The results indicate a high degree of perceived satisfaction in the use of CISD, yet there is a lack of empirical evidence to support the claims made by a host of evangelical supporters. In fact, there is some evidence that CISD does cause harm to some participants.

The research recommended that clinical studies be conducted, to test empirically the effectiveness of CISD, and other interventions for reducing distress in emergency service workers. Additionally, the best answer may lie in prevention through the basic principles sound management, effective command presence, solid developmental supervision and family support.

A final recommendation is to believe in a few principles of life. People are tough; friends and family are important; conversation helps; and, time heals all wounds. As we judge CISDs effectiveness, it is important keep in mind that research shows it makes a lot of people feel better about lifes events.

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INTRODUCTION

For well over the past decade, Critical Incident Stress Debriefing (CISD), has been promoted as a process of reducing the psychological distress, a significant problem experienced by emergency service workers following critical incidents. Because of the increased recognition of the psychological effects of this trauma on emergency service workers, CISD has gained in popularity as the preferred intervention following a personally traumatic event. While it has been used extensively following these "critical" events however, little evidence is available on its effectiveness.

This research project used descriptive methodology to investigate the relative worth of CISD. The purpose of this research project is to first to describe the history of CISD, the CISD process, and then to examine the following questions.

1. Why has the utilization of CISD increased dramatically over the past decade?
2. Do emergency service workers experience a reduction in distress participating in CISD after a traumatic (critical) event?
3. Is there scientific data to support CISD as a proven process in reducing the effects of Critical Incident Stress (CIS)?
4. Is CISD harmful to participants?
5. Should CISD be a mandatory process utilized by all emergency service workers who experience a critical incident?

Research was conducted by reviewing articles in professional journals, magazines and periodicals, textbooks, previous Executive Fire Officer (EFO) research projects and information

obtained by talking to associates throughout the emergency services community and surveys.

BACKGROUND AND SIGNIFICANCE

Identification of stress as a significant factor affecting the health of emergency service workers has reduced "macho" resistance to stress management interventions. In little more than a decade, suggestions to utilize stress management techniques have come from being a rarity to being openly embraced by all but the most skeptical professionals.

Stress, a term coined in 1926 by the Austrian endocrinologist, Hans Selye, is a normal human characteristic, which refers to the general response of the body to any demand placed on it. The demand Selye referred to is called the stressor, and the stressor leads to the stress response which, in turn, may lead to stress related disease. Only when stress moves to dysfunction is it called distress. Selye further subdivided stress into cumulative, or the daily hassles of life and traumatic, or sudden, intense stress. Finally, Selye referred to the maintenance of normal internal balance as homeostasis.

Some workers, through conditions or choice of occupation, place themselves in stressful situations at a higher frequency rate that others. In addition to traumatic or "critical" incidents, a multitude of other sources of occupational stress are likely to be encountered by emergency service workers, especially professionals.

Beaton and Murphy (1993), identified 14 independent Sources of Occupational Stress (SOOS), inherent and/or related to employment of professional firefighter/EMT or firefighter/paramedics. These few items also were included which assessed carry over stress from family problems and/or problems of a second job (Appendix A).

Critical Incident Stress Management (CISM), from it's inception and still is, according to

Mitchell, a systematic and comprehensive approach to mitigate stress. CISM is a subset of an even broader field, “Crisis Intervention”, which has been in existence for over 50 years. Pre-incident stress education programs, on-scene support, peer and significant other support programs, defusings, debriefings, follow-up services and referral procedures are only some of the many components of CISM. Although well known, CISD is only one aspect of CISM (1987).

In 1983, after nine years of ground work, Mitchell introduced Critical Incident Stress Debriefing (CISD). He formed CISD teams made up of trained mental health professionals and specially trained peer support personnel drawn from the ranks of emergency services (Kowalski, 1995, p. 120). The model he developed was designed to prevent and manage the horror resulting from traumatic stress, and reduce the casualties among emergency service personnel.

“CISD is defined as a group intervention technique applied subsequent to a traumatic event. It is designed to achieve two goals: mitigate the impact of a traumatic event; accelerate normal recovery” (Mitchell, Everly, 1994, p. 5). Mitchell adds, “CISD is soundly based in crisis intervention and educational principles...the process was not designed as a form of psychotherapy, nor is it considered as a substitute for psychotherapy”.

A CISD is structured in that it follows a specific format. The Mitchell model poses seven unique phases, which are integrated with stress education and information throughout the process. The seven phases of the debriefing process are:

1. Introductory phase (rules and process explained).

2. Fact phase (what they saw, heard, smelled, touched and did).

3. Thought phase (first thoughts).

4. Feeling phase (emotional reaction).

5. Assessment phase (physical or psychological symptoms).

6. Education phase (stress response syndrome).

7. Re-entry phase (referral information), (Kenardy et al., 1996, pg 38).

The CISD is provided by a specially trained team which includes at least one mental health professional and several peer advisors. “Peers” are emergency service workers who have also received training in CISD. They lend support to the traumatized group as well as credibility to the process. An average CISD lasts two to three hours and is typically conducted 24 to 72 hours after the incident.

The author of this research paper was a charter member of the Utah Critical Incident Stress Debriefing Team (UCISDT), which was organized in June of 1987. The first “basic” training program for team members was conducted by Mitchell on November 17-19, 1987. Mitchell stated then and has written since that EMS providers are sometimes as vulnerable to harm as the victims of the incident. “Rescuers are vulnerable human beings who have all the normal physical and psychological responses to the horror of human suffering.” (Ostrow, 1996, p. 29).

As we studied in Advanced Leadership Issues in Emergency Medical Services (ALIEMS), the Quality Management Process Model asks us to establish goals, identify problems, test theories, implement plans and examine performance. In order to do this with the CISD process, this research paper revolves around the current debate of the effectiveness of CISD in reducing the stress on EMS workers and the impact on career longevity.

No one doubts that emergency service workers benefit from talking about stressful calls rather than keeping their feelings inside. However, just as the scientific foundation of long accepted emergency

response practices are being questioned, “critics are questioning the lack of research supporting CISD, the promotion of CISD as a scientifically proven process, and the failure of the EMS (emergency service) community to recognize CISD as a business (Ostrow, 1996, pg. 29).

Kenardy et al. (1996) argue, “Despite the growing use of debriefings and the general acceptance that it is a necessary intervention for the posttrauma response, there have been no systematic evaluations of its effectiveness”.

LITERATURE REVIEW

Introduction

The literature review process was used to find information on CISM/CISD; background information on stress; and, scientific data both in support and against the utilization of CISD as the primary model for dealing with traumatic stress in emergency service workers. A wide variety of periodicals, journals, text and research papers were used to garner the necessary information for this process.

At some point, the question must be asked, “Why is there this passionate, nearly evangelical support exist for the Mitchell (1983) model of CISD. For many, it is the only intervention employed for preventing and treating the maladies associated with traumatic stress. In most of lifes endeavors, timing is everything, and the introduction of CISD coincide with several historical components that allowed emergency service workers to embrace it.

As Ostrow (1996) discussed, there were four elements that contributed to the acceptance.

First, in the late 1970's, the plight of the Vietnam veterans brought about a new awareness of the dangers of stress. This was later to be diagnosed as post traumatic stress disorder (PSTD). Second, by the early 1980's, emergency medical services (EMS) had come into its own as a profession. This allowed these workers to shift their focus from getting the job done to "quality of life" issues like burnout, stress, grief and anxiety. Third, during this evolutionary period, emergency services saw several ghastly tragedies to which the nation responded with shock and sorrow. Among these were the Hyatt Regency Skywalk collapse in 1981, the MGM Grand fire in 1982, and two jet liner crashes in 1982. Finally, the development of CISD coincided with a shift in the way Americans, as a whole, were thinking about their health. CISM/CISD continued to grow without scrutiny because little was known about stress and its effect on emergency service workers.

CISD, Arguments in Favor

Step into a clear puddle with muddy boots and you get muddy water. It is a cause and effect relationship, however they are not always easy to prove, especially in human thought processes, emotions and behaviors argues Mitchell (1997). Many variables influence the outcome of a particular procedure or series of procedures. Such appears to be the case with CISD.

CISM is necessary

The argument that emergency service personnel are not seriously stressed does not stand up to research according to Mitchell (1997). As an example he cites the Colen (1978) research where 42 rescuers were studied for one year after the San Diego air crash. Only five of the personnel had any

previous counseling prior to the disaster. One year after the crash 13 (31%) were in counseling.

Another study conducted by Corneil (1993) confirmed the dose-response effect of exposure to a traumatic event and the prediction of PTSD. Corneil found that the rate of PTSD of Toronto firefighters was 16.2%. This is similar to the prevalence rate in Vietnam veterans, and much higher than the general population at 1.97%.

Tristan Ravenscroft (1994), studied the London Ambulance Service (LAS) and concluded that job stress was the main reason for sickness of the LAS staff. In fact he discovered that 97% felt stress was their main problem and that no less than 15% reported symptoms which crossed the threshold for acute PTSD.

It would appear that need for stress management is a reasonable approach to alleviating the burden of stress in some emergency service workers.

Positive effects of CISM/CISD

Mitchell (1997), in his rebuttal article in *Jems*, addressed claims of authors who report opposite findings to his. CISM/CISD literature indicate both positive and negative outcomes. When this occurs, several questions should be raised. Are they following the same procedures? Have the service provides been adequately been trained to perform services such as debriefings? Have the groups studies suffered equal levels of trauma? In other words are we really measuring the same things? Mitchell argues that it isn't only the CISD process that is being measured but rather the training, skill and experience of the providers as well. This is the same process many have reached regarding research in psychotherapy (Seligman, 1995).

Lanning concludes in her study of the public safety workers attending debriefing sessions after the Delta Airlines flight 191 crash, six identifiable positive perceptions. They are:

1. The debriefing prepared participants for future stress symptoms.
2. The debriefing enabled participants to accept symptoms and not feel "crazy".
3. Participants received support from other participants.
4. Some problems were resolved.
5. The participants felt safe in talking about their feelings and not having to hide them or be "macho".
6. The mandatory debriefings did not make the participants feel singled out (1987, p. 2922).

In another study, Bohl explored the "Mitchell Model" debriefing process . The study involved a naturalistic randomized control group. That is, some personnel were given a debriefing and others, in a neighboring department, were not. "The results showed that a brief intervention, 1.5 hours in length, given 24 hours after a critical incident reduces delayed stress symptoms in firefighters" (1995, p. 125). On all four measures tested, depression, anxiety, anger, and long term stress symptoms, she indicates the untreated scored significantly higher and had more signs of stress than the treated group.

After the Los Angeles riots in 1992 researchers studied the impact of stress reactions on emergency service workers and the effectiveness of CISD. Using the *Frederick Reaction Index*, those who received debriefings were compared with those who were not. "Those workers who were given an opportunity to participate in a CISD session scored significantly lower on the index, with an average of 10.7 compared to a mean of 14.3 for those not offered this service" (Wee, 1996).

Hanneman evaluated the effect of the "Mitchell model" of debriefing on volunteer firefighters in Nova Scotia. She concluded, "This research was able to support basic assumptions and rationales which are the foundation of Mitchell's model. Debriefings were found to be effective in reducing signs and symptoms of distress...peer support was identified as very valuable" (1994, pp.48-49).

Finally, Chemtob, Thomas, and Law (1996) utilized the CISD process on rescue personnel after a hurricane. Despite the fact that the intervention was six months post incident, the process was found to be effective in reducing symptoms of distress.

The debriefing aspect of CISM has been applied to a diverse group of emergency service worker, both professional and volunteer. "Numerous empirical investigations have concluded that CISD is effective in reducing distress associated with critical incidents...regarding persistent claims that there is 'no' evidence to support the use of CISD, the facts are clearly to the contrary" (Mitchell, 1997, p. 42).

Legitimate theory base for CISM/CISD

Critical Incident Stress Management (CISM) which, from its inception was, and still is a systematic and comprehensive, multi-component approach to mitigating stress (Mitchell, 1983). Although well known, Critical Incident Stress Debriefing (CISD) is only one aspect of CISM. CISD does not comprise an entire multi-component approach nor is it synonymous with CISM (Mitchell, 1992).

CISD is not a "stand alone" process. Instead it is part of a systematic approach to stress management, namely, CISM, which is part of an even broader field, "Crisis Intervention". Mental health professionals or peer support personnel have provided crisis intervention for

over fifty years in both the mental health and emergency services (Mitchell, 1997, p. 87).

Crisis intervention is well founded in mainstream psychological and social theories . Much of the theoretical background for CISM operating mechanisms is summarized in the Journal of Mental health Counseling (Everly, 1995).

CISM/CISD scrutiny

Empiricism refers to the science of observation and observational scrutiny can arise from many sources. Mitchell (1997) identifies three sources of empirical scrutiny for CISD. The first source is the publications in reviewed journals. He offers the reference list for his January ,1997, *Jems* as credible evidence of this.

Second, the evaluations of those who use the service. Studies found that over 90% of the hundreds of personnel in these studies who received CISD services evaluated the services as beneficial (Robinson and Mitchell, 1993; AAOS, 1996).

The third source of evaluation are the many hundreds of well qualified mental health providers who have received training to provide CISM services argues Mitchell, (1997). His belief is that if the training were not based in solid foundation of an accepted behavioral sciences theory, (crisis intervention), these professionals would have abandoned the process long ago. Rather, it appears as though their evaluations of the usefulness of the CISM program are consistently positive and encouraging.

The need for CISM training

Mitchell asks the question, "How can people be expected to provide appropriate CISM services without being trained to do so? Careless or untrained interventions may do more harm than good (1997). He argues that there is considerable evidence to refute the premise that training in CISM is unnecessary.

The effects of well-trained crisis interveners clearly had more positive effects than did untrained helpers in a study by Bordow and Porritt (1979). In another study, Dyregrov (1996), also emphasized the necessity of appropriate training to provide CISD. He conducted a study where two separate traumatic events were managed by trained, experienced debriefing teams. A third event, was managed by a team which received only a brief lecture on CISD, just prior to providing the service. All teams were made up of mental health professionals. Evaluation of all three debriefings were compared, with significantly higher satisfaction levels found in those groups with more significant training.

Mandatory CISD

CISD for emergency service workers following unusually distressing events are becoming a standard operating procedure (SOP) in many fire departments, law enforcement agencies and hospitals according to Scott, Rigg, Contreras (1994). Chief Alan Benson indicates "by protocol, debriefing is mandatory for Oklahoma City Fire Department personnel. We take away the judgement call for the individual of whether or not they feel like they need it. Everyone goes" (Dernocoeur, 1995, pp. 33-34).

Bohl (1995) examined the effectiveness of CISD, in a study of 65 male firefighters. All had been involved in a traumatic incident and thirty men received treatment; thirty-five did not. Those who participated in the treatment group came from departments who had mandatory treatment programs. As

noted earlier in this paper, the study found the untreated group had more signs of delayed stress than the treated group. She then interpreted the findings as follows:

> Firefighters witness episodes that are so far beyond the ordinary that they would evoke psychological distress in any healthy, normal individual; but because firefighters feel such a need to demonstrate that they are strong and in control, they often are reluctant to seek professional help on their own. It is recommended, therefore, that treatment be mandatory for firefighters who have been involved in a critical incident. A mandatory program would take the burden of decision making out of the individual's hands (p. 126).

Mitchell (1997) summarizes the positive aspects of CISM/CISD. He believes since scientific studies already indicate there are positive results when debriefings are run properly by well trained and skillful team members, we should focus on how to improve CISD and other CISM interventions, rather than attempt to prove CISD doesn't work.

CISD, Arguments Against

In Gist's article in the May issue of *Jems*, he with a litany of other researchers, take the position opposing Mitchell, Everly and others, and speak on CISD. Critical and more objective overviews, argue Williams, Solomon and Bartone (1988), have been oddly absent from the literature, and well structured empirical research on the process and its outcomes has remained conspicuously unreported.

No reliable evidence of effectiveness.

Stress debriefing has been promoted as a means of preventing or reducing the psychological

distress experienced by emergency service personnel. Kenardy et al. (1996), found stress debriefing has been used extensively following traumatic events; however, there is little evidence of its effectiveness. In their research of emergency service workers following an earthquake in Australia, they found no evidence of an improved rate of recovery among those debriefed.

In McFarlane's study of "Ash Wednesday" bush firefighters discovered that debriefing was not predictive of posttrauma stress generally. More specifically he found that debriefing was associated with reduced acute posttrauma stress, but also with increased delayed posttrauma stress (1988).

Despite the growing use of psychological debriefing and general acceptance that it is a necessary intervention, Silove adds, there have been no systematic evaluations of its effectiveness (1992).

In yet another study, Griffiths and Watts (1992) examined relationships between stress debriefing and stress symptoms in emergency workers involved in bus crashes. They discovered that there was no relationship between the perceived helpfulness of debriefing and symptoms.

Finally, speaking for several researchers in an article for *Jems*, Gist et al. (1997) conclude, after reviewing the available body of research that "...there is no reliable evidence from any credible source indicating objectively demonstrateable preventative benefit (p. 27)."

The "Mitchell Model" is superior to traditional interventions.

The debriefing process itself is neither unique nor particularly remarkable when viewed as group counseling. Still as Woodall states "it is clearly Mitchell's work, coupled with growing attention to the impact of major disasters on the well-being of rescue personnel, which transformed a simple group process intervention into the foundation for an evangelical social movement" (1994, pp. 9-10).

The Coreys (1992) describe group counseling as a process that usually has a particular problem that the members focus on. Typically, group members are sound individuals who are not looking for extensive behavioral change. The focus of these groups is usually determined by the members and depends on determining significant means to deal with the stresses of situational crisis. The group goals are educational, preventative as well as corrective, and are developed through an interpersonal process and a problem solving strategy which emphasizes conscious thoughts, related feelings and commitment.

Woodall (1994) attacks Mitchell's account of the his CISD model being "...inherently and demonstrably superior approach to resolution and intervention; indeed, other approaches may even do harm (p. 19)". His position is that there aren't any comparative studies of the Mitchell model to any other treatment or non-treatment options.

Gist et al. (1997) support the same belief in their rather direct statement:

> What palliative effect may be derived is no greater than that from traditional vehicles of organizational and social support. There have been no data reported in any credible venue that would suggest the "Mitchell model" of debriefing as superior to any other system of addressing psychological and organizational impact on occupational events (p. 27).

Grollmes (1992) noted yet a further set of reservations with respect to the Mitchell's approach

to debriefing, questioning the preparedness of "peer support members". In some cases, with only a few hours of training, peers may respond to complex, volatile situations. His concern is that debriefings are perceived to be careful, safe and technique driven that it was assumed to be manageable by any mixture of mental health professional and peers. He saw this as potential for misadventure to be extreme.

Treatment induced harm from CISD.

There is real concern in the mental health community about the harmful effects of the application of the "Mitchell model" on emergency service workers. Ostrow identified two studies which directly questioned the value of CISD (1996). First, a 1994 article in the *British Journal of Psychiatry* cited a number of studies that failed to confirm positive outcomes. Second, in 1995 three Australian researchers published in the *British Medical Journal,* similar concerns adding that debriefing "may not be appropriate in timing or format for some people and may lead to secondary traumatization".

Griffiths and Watts (1992) examined relationships between stress debriefing and stress symptoms in emergency personnel involved in bus crashes. They found that those who attended debriefings had significantly higher levels of symptoms at twelve months than those who did not attend debriefings. They also found that there was no relationship between the perceived helpfulness of debriefing and symptoms.

Gist et al. (1997) report no effect or negative impacts from CISD, come from legitimate journals conducted by valid researchers. Moreover they also noted:

Research now working its way into press portrays similar findings, including a prospective study

with random assignment that reports a significant negative impact of probable iatrogenic origin, and the preliminary report of an extensive study of more than 1,600 firefighters that finds significant elevations in intrusion [a principal symptom of PSTD] for those who received debriefing, even though some relative differences in depression were found.

Mandated CISD

Proponents of the "Mitchell model" indicate there are certain incidents which, by virtue of their nature or magnitude, trigger potentially stressor responses from emergency workers. He specifies the following events which demand intervention:

> Death or serious injury to an emergency responder, mass casualty incidents, suicide by an emergency responder, death or serious injury to a civilian as a result of agency operations, death or violent injury involving a child, loss of a citizen after extraordinary or prolonged rescue efforts, or any event which attracted unusual or critical media coverage (Mitchell, 1988, p. 45).

While perhaps understandable as a reasonable list of events which might arouse unusually strong emotional responses, Woodall (1994) argues, no direct evidence has been presented which would establish how these particular events were determined to hold such ties or by what mechanism their intended impacts evolve in those affected.

Redburn, Gensheimer, and Gist (1993) conducted, and Woodall (1994) reported a test, of the career firefighters who participated in the rescue and recovery operations surrounding the crash of United Airlines Flight 232 in Sioux City, Iowa. Comparison of those who took part in psychological

debriefings and those who declines participation yielded no clinically significant difference in symptom levels two years later.

"The clear conclusion is that no ill effect arising from non-attendance at postincident debriefings can be said to have demonstrated in any valid study, nor can any prophylaxis be soundly ascribed to the presence of such interventions" (Woodall, 1994, p. 15).

What originally started as a simple idea about how a group review of an incident might help put it into perspective, Gist notes (1996), has grown to include assertions that failure to implement a CISD leaves personnel open to psychiatric disorders and career dissipation. Along with this growth is a disturbing movement toward mandatory participation in debriefing exercises after certain events. Claims as these help feed the growth of social movements, but they raise a skeptical eye in the conservative side of mental health professionals. As reported by Dernocoeur, (1996)

> Mitchell himself cautions against the overuse of CISD. There needs to be a reorientation on the emphasis [of doing it properly] so people don't see CISD as the be-all end-all. It is not a miracle and will not eliminate all pain for all people in all circumstances. You can't expect too much of it. It is one step in the whole series of steps designed to mitigate the impact of traumatic stress (pp. 32-33).

Alternative approaches

Gist and Taylor (1992) have argued for several years that more general and diverse social and organizationally based approaches hold more potential for effective intervention than do narrowly focused, individually based, technique-centered models of intervention.

These programs Woodall (1994) argues:

Intend to focus the agency's resources toward a series of conceptual issues which must be addressed by any organization to build healthy, functional approaches to management, command and supervision; to encourage strong individual a family resiliency; and to ensure the least intrusive but most effective internal response to any significant challenge to agency and career development (p. 21).

Understanding our work

According to Woodall (1994), the ongoing, daily relationship between the individual and their work is the essence of resiliency in any occupational context, irrespective of the appearance of or nature of occasional "critical incidents".

Beaton and Murphy (1993) examined stress factors in a sample of firefighter/EMT and firefighter/paramedics in Washington state. They found very limited impact (cumulative effects) on the workers from prior critical incidents. Substantial stress factors were noted, however, that directly reflected life and work variables of the more mundane, everyday variety.

A healthy understanding of the nature of ones work according to Gist & Obadal (1994), is assumed as the basis for healthy occupational adaptation.

Consistent daily management

Woodall (1994) believes the soundness of daily operations and interactions determines the basis for resiliency when an agency is confronted with extraordinary challenges and demands. Well planned

and practiced leadership and management principles are critical elements in creating a stable work climate.

Well managed incident command

"The best preventative of incident stress and its sequelae, both organizational and individual, is clearly a well managed incident (Woodall, 1994, p. 23)".

Redburn, Gensheimer, & Gist (1993) compared the 1981 Hyatt Regency hotel collapse in Kansas City with the 1989 Sioux City airplane crash. While the incidents were nearly identical in terms of number killed, body recovery, extrication problems they differed remarkably in their organizational and operational characteristics. The virtual absence of post incident stress problems with the emergency workers at Sioux City could not be attributed to the presence or absence of CISD. What was different was the known and precise scheme for organization of the operation, especially a well practiced and implemented incident command structure.

Family support

Redburn, Gensheimer, and Gist (1993) found family support to be the most significant factor in successful coping following a major incident. Family interaction is also demonstrably crucial to occupational adaptation and career success notes Woodall (1994).

Summary

As we have seen there is an array of data, provided by many authors and researchers lined up both in favor of the continued use, even the expanded use of CISD, and against using CISD as the

primary component of stress management. Those against favor more traditional interventions in assisting emergency service workers.

Whether help for the helpers is available, adequate or even needed appears to be in the eye of the beholders. The impact of traumatic events varies from person to person depending on previous life experiences, personalities and individual circumstances.

Anecdotally, there are countless accounts in support of and against CISD. Ostrow (1996) reports on a comment made by John Hamling, a firefighter and psychologist from Australia, who stated:

> Most emergency service workers neither want or need CISD's most of the time. Everyone is affected by the jobs they go to, but we react and cope in different ways. Sometimes you get angry, sometimes you cry, sometimes you throw up. We mostly know why this happens, and we get over it by ourselves (p. 34).

Taking a slightly different position, still less evangelical than many, Dernocoer (1995) quotes Susan Sabor, New York City EMS Employee Assistance and Trauma Intervention Program Director, who commented:

> Anecdotally, people have told us CISD works. It offers a cognitive framework often a reframing of the event, as well as an opportunity to process some of the troublesome reactions. I do believe it helps. But it depends on where you are looking. Programs are set up with good intentions but without ongoing support are often over-, under- or inappropriately used (p. 33).

It is important for us not to loose sight of the most basic principle that gave this movement its focus. As Gist et al. (1997) remind us:

> "It helps in times of challenge, to talk with those who share our experiences and those who share our worlds; such exchanges help us to restore perspective and equilibrium, while helping us to incorporate the events of our lives into our evolving views of our worlds. But, ...[we have] no evidence to suggest that self proclaimed and self venerated mechanisms of intervention greatly improve outcomes or that failure to invoke such interventions greatly inhibits it (p. 28).

Finally, informal support is favored over structured intervention by many researchers. As we have seen in alternative approaches to CISD, such as healthy understanding of our work, sound management, command presence and family support may prevent the need to treat acute stress related to traumatic incidents.

PROCEDURES

Research

The research for this project was initiated with an extensive literature review with the Learning Resource Center (LRC) at the National Fire Academy (NFA), in order to address the research questions posed. Data collected identifies the logic behind the increased usage of CISD by emergency service workers over the past decade. It also determined that there is "heated" debate on both the

benefits and harmful effects of CISD to the participants in "Mitchell model" interventions.

In regards to the question of scientific data available analyzing the effectiveness of CISD, it is virtually nonexistent. Information gathered through the literature review shows there is an abundance of data, but it is usually anecdotal and under severe scrutiny by the group having the opposite position. The same is true of the whether or not CISD should be mandated by the SOP's of an agency. There is speculation on both sides of the issue.

Population

A survey (Appendix B) was conducted of three, separate NFA classes in June 1997. Its purpose was to determine, anecdotally, the perceived effectiveness of CISD in reducing the short and long term effects of traumatic stress on emergency service workers. A total population of 70 was asked to complete this research tool and the results were examined. The information gathered from the survey is reported in the "Results" section.

Research was also conducted to evaluate the perceived effectiveness of CISD's, conducted by the Utah Critical Incident Stress Debriefing Team (UCISDT). Since its inception more than a decade ago, over 600 interventions, primarily debriefings have been conducted. Slightly more than three years ago, the team began to ask debriefing participants to evaluate the team's performance through the use of he *CISD EVALUATION QUESTIONNAIRE* (Appendix C). Unfortunately, data from only 19 debriefings with a total of 161 participants was available for analysis, which is summarized in the "Results" section.

Assumptions and limitations

It was assumed that all respondents would completed surveys honestly, accurately and that they had some knowledge and/or experience with the subject. Respondents were not furnished with any data on CISM/CISD in an effort to not prejudice their perceptions.

Limiting factors of the surveys were the small populations surveyed; and inability to determine if the body of the respondents was an accurate sampling of emergency service workers. Additionally, the UCISDT evaluation was administered immediately after the CISD which could easily skew the responses. The selection process was based exclusively on the availability of blank evaluations at debriefings, the ability of the debriefing team to ask that they be completed, and the desire of the participants to complete the evaluation. A sample of the evaluation is presented in Appendix C. Finally, both surveys could have been crafted with scales of 1 to 5, rather than *yes* or *no* to better determine the degree of satisfaction or dissatisfaction.

RESULTS

There appears to be at least four elements that contributed to the increased utilization of CISD in emergency services over the past decade. First, the fact that Vietnam veterans brought about an awareness of work related stress, in particular PSTD. Second, EMS came into itself as a profession, a "third service", which allowed for a shift to quality of life issues for these workers. Third, several large incidents with broad media coverage which solicited the nations response of shock and sorrow. Fourth, a shift in the way Americans were thinking about health.

Researchers seem to be divided on whether there emergency service workers receive a benefit from CISD after a traumatic incident. In the many articles researched, Mitchell, after whom the CISD model is named, is representative of those in favor. “Numerous empirical investigations have concluded that CISM/CISD is effective in reducing distress associated with critical incidents” (1997, p. 42). Gist a former colleague of Mitchell and one of the strongest opponents of CISD, on the other hand, argues “there is no reliable evidence from any credible source indicating objectively demonstrateable preventative benefit [of CISD]” (1997, p. 27).

This identical joust is repeated for the remaining questions under consideration in this writers research. The proponents of CISD evaluate the available date and report findings to support the “Mitchell model,” as a proven process in reducing critical incident stress, without causing any harm to the participants. As can be anticipated, the opponents believe there isn’t any data reported in any credible resource that suggest CISD is superior to any other method known for addressing the psychological and organizational impact on emergency service workers. Additionally, the opponents note there is real concern in parts of the mental health community about the treatment induced harm of CISD.

The question of mandated CISD raises different concerns from both sides of the aisle. The pro CISD faction, espouses the position that agency SOP’s which require attendance by all members involved in a traumatic event, “takes away the judgement call” of whether or not they need it. Naturally, the “flip” side believes there is no reason to believe that failure to implement a CISD will lead to psychiatric disorders and career dissipation and that it may antagonize participants or even cause harm. An interesting caveat is that Mitchell cautions against the overuse of CISD (Dernocoeur, 1996).

The more the subject was researched, the more evident it became that the debate over the effectiveness of CISD is far from over. Empirical and anecdotal evidence is mounting both for and against the worth of CISD. Individual choice and time will eventually decide its worth to emergency services.

Surveys

The results of the survey conducted at the NFA in June, 1997 are summarized in Table 1, below.

TABLE 1

	RESPONSES						ISSUES
NO.	YES	%	NO	%	UNSURE	%	
1.	59	84.2	11	15.7	0	0	Is CIS a problem?
2.	64	91.4	6	8.5	0	0	CIS experience in last five years?
3.	63	90.0	6	8.5	1	1.4	Any debriefings held?
4.	52	74.2	6	8.5	12	17.1	Positive short term effect?
5.	41	58.5	11	15.7	18	25.7	Positive long term effects?
6.	59	84.2	11	15.7	0	0	Agency SOP for activation of CISD?
7.	22	31.4	46	65.7	1	1.4	Agency SOP is mandatory CISD?
8.	56	77.1	6	8.5	10	14.2	Was CISD team responsive?
9.	48	68.5	16	22.8	6	8.5	Is CISD reducing job burnout?
10.	8	11.4	55	78.5	7	10.0	Any follow-up two years post incident.?

Note: N=70

The responses, while anecdotal, give valuable insight into what the perceptions are regarding CISD in emergency services. Respondents believe traumatic stress is a problem in our profession and 91% have had personal experience in the past five years. Most believe that the CISD process was beneficial in the short and long run, yet most agencies, 65%, do not mandate the process by SOP. Finally, the perception of 68.5% of the respondents is that CISD helps in reducing job burnout.

The second survey was an evaluative critique, conducted by the UCISDT after selected CISD's since August, 1994 (Appendix C). The summary was exceedingly easy to calculate. In the nineteen interventions surveyed, all were debriefings. There were 161 participants, (N=161) with an average attendance of 8.4 participants per debriefing. 100% of the respondents answered "yes" to all questions with the exception of questions 1 and 8, where a narrative answer was required. No table is provided for this summary due to no variation in responses.

The comments noted on the surveys were few, but the themes were repeated. First, the length of the debriefing, some wanted more time others less time. Second, the greatest comment was to have the debriefing closer in time to the incident. Since no date is available on the form, it is impossible to determine if the debriefing was held in the 24 to 72 hour window as suggested by Mitchell. A final comment repeated several times was that [without CISD], "we couldn't stay on the job".

There was one surprise discovered. Going into this research it was anticipated that there was universal acceptance of CISD, and that there would be evangelical embracing by all in emergency services. This clearly was not the case. By and large the users still perceive it to be valuable. Whether

this continues, only time and research will tell.

DISCUSSION

It appears, the research gathered in the literature review, from the proponents of CISD as well as the data gathered from surveys, are similar. The literature also makes us acutely aware of the corresponding opposing sentiments. Awareness of traumatic stress as a problem of our profession is high. It is being addressed through the use of debriefings, and other "traditional" interventions, and is generally considered to be effective.

It is always appropriate to question effectiveness and certainly reasonable to advocate more science, more accountability and more evaluation. It must , however, be done in a balanced manner, without innuendo or sensationalism. "Study wars" with one side trying to prove that CISD does not work and the other trying to prove it does, are counter productive (Mitchell, 1997).

Normal reactions to stress and the formation of defense mechanisms are desirable and a healthy response to stimuli. This writer has been involved in the delivery of emergency services for over twenty years, was a founding and current member of the UCISDT, and will continue to participate in debriefings, unless its proven to be ineffective or harmful. I have participated in many CISDs that worked and a few that didn't. Hopefully, I will do no harm.

As is argued by Gist (1996) and others that in the past, psychological interventions weren't needed because "captains" and "chiefs" were available. They provided management, supervision, leadership and support. The obvious problem is that not all company and chief officers are "approachable" and provide guidance and support for their associates. CISD is there for those emergency service workers who aren't fortunate to have support mechanisms in place or for those traumatic events that warrant a CISD. Mandating CISD, based on Mitchell's traumatic "set" is not

practical or appropriate. Clearly some workers need it, some don't.

RECOMMENDATIONS

The problem of work related stress, as well as traumatic stress was identified as significant factors of distress in emergency service workers. To put to rest the "research wars" so evident in this paper, a series of clinical studies should be conducted with the purpose to recommend interventions that work with, CISD being one of them. These studies, hopefully, will answer the questions raised as the purpose of this paper.

This doesn' t mean that we should ignore psychological trauma. The most effective way to ease CIS seem to lie in the basic principles of sound management, effective command presence, well developed family support, solid, consistent developmental supervision, training and physical conditioning. These prevention principles combined with CISD or other interventions, when needed and wanted, may be the best combination for meeting the stress of traumatic events.

It is important for us to not loose sight of the most basic principle that gave this social movement its impetus. Gist, et al. (1997) reminds us that like many things in life, it is related more to what we learned from our Grandma than what we learned from grad school. In times of challenge it helps to talk with those who share our experiences and worlds; such exchanges help us to restore perspective and equilibrium.

A final recommendation is for those in emergency services to believe in a few simple principles of life. People in general are tough; friends and family are important; conversation helps; and, time heals

all wounds. As we rush to judge the effectiveness of CISD, lets keep in mind that research has shown CISD makes a lot of people feel better after some of lifes horrible events. That in itself may be reason enough for it to exist.

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APPENDIX A

SOOS Factors and Items/Variables	Factor Loading	Eigen-Value	Variance (%)
1—Sleep Disturbance		15.05	26.4
Loss of sleep	.88		
Disruption of sleep	.84		
Not getting enough sleep at work	.84		
Poor quality of sleep	.80		
2—Job Skill Concerns		3.68	6.5
Concerns about inadequate skills	.78		
Concerns about meeting standards set by administration	.72		
Concerns about making mistakes on the job	.72		
Concerns about being perfect in work-related duties	.71		
Concerns about not knowing latest technology	.57		
3—Past "Critical" Incidents		2.96	5.2
Recollection of sounds, smells, or sights of injured/dying people	.82		
Thoughts about past run(s) that have been particularly upsetting/disturbing	.71		
Exposure to injury and mutilation of victims	.67		
Lack of control over nature and extent of victim's injuries	.64		
Exposure to death and dying	.70		
4—Management/Labor Conflicts		2.42	4.2
Conflict with chief administrative officer(s)	.82		
Exposure to anxious or overly demanding co-worker or administrator	.66		
Management/labor conflicts	.65		
Conflict with immediate superiors	.61		
5—Apprehensions Regarding Personal Safety		1.78	3.
Concerns about serious personal injury/disablement/death due to work	.75		
Exposure to increased personal risk due to nature of job	.67		
Threats to your own personal safety	.58		
6—Co-worker Conflict		1.65	2.9
Conflicts with co-workers and team members	.80		
Personality conflicts with co-workers or team members	.75		
Lack of camaraderie among co-workers	.52		
Working with substandard co-employee	.51		
7—Substandard Equipment		1.54	2.7
Working with substandard equipment	.79		
Working with malfunctioning or improperly maintained equipment	.77		
8—Reduction in Force/Wage/Benefit Worries		1.47	2.6
Reduction in force/reduced department size or budget cuts	.84		
Reduction in force; real or threatened reductions in personnel, wages and/or benefits	.83		
9—Conveying News of Tragedy		1.37	2.4
Conveying news of tragedy to survivors	.81		
Telling family and friends that their relatives have died or been severely injured	.78		
10—Tedium		1.30	2.3
Lack of novel experiences/too much boredom on the job	.63		
Dislike of day to day duties	.57		
11—Poor Health Habits		1.19	2.1
Poor diet	.73		
Lack of exercise	.69		
12—Discrimination		1.15	2.0
Discrimination based on gender, ethnicity, or age	.83		
Harassment based on gender, ethnicity, or age	.80		
13—Family/Financial Strain		.13	2.0
Carry-over stress from family problems	.65		
Financial strain due to inadequate pay	.51		
14—Second Job Stress		1.08	.9
Carry-over stress from a second job	.64		
Too much responsibility	.51		
Cumulative percentage of variance accounted for by 14 Sources of Occupational Stress [SOOS] factors = 66.3%			

Table 2—Principle Components Factor Analysis of Combined FF/EMT and FF/PM Replies on Sources of Occupational Stress (SOOS) (n = 1,968–1,996)

APPENDIX B

CRITICAL INCIDENT STRESS DEBRIEFING EVALUATION SURVEY

I am Greg Rynders, a Battalion Chief by profession, and a third year Executive Fire Officer Program (EFOP) student, currently in the Advanced Leadership Issues of EMS (ALIEMS) class. Recent articles in *JEMS* and *FIRE CHIEF* questioned the long term value of Critical Incident Stress Debriefings (CISD), in relieving both incident specific and cumulative stress of emergency service workers.

Kindly take a few minutes to complete the following survey. Your input is extremely valuable to my research of this EMS issue. Should you be interested in the results of this research, please indicate this by providing me with your name and address on the back of this survey. Your feedback will be held strictly confidential. Use the back for added comments if necessary.

Do you believe that critical incident stress is a problem in emergency services today?
Yes_____ No_____ Unsure_____ Comment_____

Has your agency experienced any incidents in the last five years involving critical incident stress?
Yes_____ No_____ Unsure_____ Comment_____

Has your agency had any debriefings or other interventions relating to these incidents?
Yes_____ No_____ Unsure_____ Comment_____

Did these interventions have a positive, immediate, (short term) effect?
Yes_____ No_____ Unsure_____ Comment_____

Did these interventions have a positive, prolonged, (long term) effect?
Yes_____ No_____ Unsure_____ Comment_____

Does your agency have a policy and procedure for the activation of CISD?
Yes_____ No_____ Unsure_____ Comment_____

Does your policy make CISD mandatory for agency members after specific criteria are met?
Yes_____ No_____ Unsure_____ Comment_____

Did you find the CISD team responsive to your request for service?
Yes_____ No_____ Unsure_____ Comment_____

Do you believe CISD is effective in reducing job burnout?
Yes_____ No_____ Unsure_____ Comment_____

Has there been any follow-up to evaluate the effectiveness of the intervention empirically, two or more years post incident?
Yes_____ No_____ Unsure_____ Comment_____

APPENDIX C

CISD EVALUATION QUESTIONNAIRE

This information is being collected to evaluate and improve the Utah Critical Incident Stress Debriefing Team (UCISDT). We appreciate you taking the time to complete it.

Date of debriefing:_____

1. How did you hear about the CISD team?_____

2. Did you find the CISD team responsive to your request for assistance?
   YES_____ NO_____ Comments:_____

3. Was the debriefing personally helpful for you?
   YES_____ NO_____ Comment:_____

4. Did you feel satisfied with the information you received?
   YES_____ NO_____ Comment:_____

5. Do you feel the CISD team was receptive to your needs?
   YES_____ NO_____ Comment:_____

6. If the need presented itself, would you use the team again?
   YES_____ NO_____ Comment:_____

7. Do you feel we should continue to extend the CISD team services to emergency service workers in Utah?
   YES_____ NO_____ Comment:_____

8. Would you please share your feelings and suggestions for improving the CISD Team?_____